

REMARKS

Claims 1, 3-16, 18-27, 29-39, 41-47 and 52-55 were examined in the outstanding office action mailed on 05/12/2006 (hereafter "Outstanding Office Action"). Claims 12-15, 24-26 and 36-38 were withdrawn from consideration. Applicant notes with appreciation that
5 claims 11, 35 and 47 were indicated to be allowable. The remaining claims were rejected.

By virtue of this response, (the previously withdrawn) claims 12-15, 24-26 and 36-38 are sought to be canceled, claims 3, 16, 18, 27, 29 and 41 are sought to be amended, and new claims 56-70 are sought to be added. The amendments, cancellations and additions are believed not to introduce new subject matter, and their entry is respectfully requested. The
10 amendments and cancellations are made without prejudice or disclaimer. Claims 1, 3-11, 16, 18-23, 27, 29-35, 39, 41-47 and 52-70 are thus respectfully presented for reconsideration.

Information Disclosure Statement (IDS)

Applicant thanks the Examiner for considering and making of record the IDS filed on February 21, 2006. The Examiner is also thanked for acknowledging the same in the
15 Outstanding Office Action.

Elections/Restrictions

The Examiner has requested cancellation of withdrawn claims 12-15, 24-26, and 36-38, and these claims are sought to be canceled by the foregoing amendment.

Claim Objections

Claims 3, 18, 29 and 41 were objected to as being dependant from canceled claims. Claims 3, 18, 29 and 41 are sought to be amended to respectively depend from pending claims 1, 16, 27, and 39. Withdrawal of the objections is respectfully requested.
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Claim Rejections 35 U.S.C. § 112

Claim 29 was rejected under 35 USC 112 for reciting a limitation ("said data structure" in line 2) without sufficient antecedent basis. In response, independent claim 27
25 (from which claim 29 depends) is sought to be amended to replace the term "table" with "data

structure", and thus provides the required antecedent basis. Withdrawal of the rejection with respect to claim 29 is respectfully requested.

Claim Rejections 35 U.S.C. § 103

Claims 1, 3-10, 16, 18-23, 27, 29-34, 39 and 41-46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lai *et al* (hereinafter "Lai"), cited in applicant's IDS submitted 2/21/2006. Applicant respectfully traverses the rejection.

For example, previously presented claim 1 recites:

A method of providing differentiated services for IP packets transported on an asynchronous transfer mode (ATM) backbone, said method comprising:

provisioning a first switched virtual circuit (SVC) and a second SVC on said ATM backbone, each of said first SVC and said second SVC being provisioned as a unicast point-to-point virtual circuit terminating between same end devices;

receiving an IP packet;

determining whether to send said IP packet on said first SVC or said second SVC according to services desired to be provided for said IP packet, wherein said determining comprises examining a header of said IP packet and wherein ***said services desired for said IP packet being based on said header, said determining also comprising maintaining a data structure indicating a specific one of said first SVC and said second SVC on which to send IP packets having a specific precedence value in a type of service (TOS) field in said header; and***

sending said IP packet on the determined one of said first SVC or said second SVC,

wherein said IP packet is sent on either said first SVC or said second SVC according to the data stored in said data structure.

(Previously presented claim 1, ***Emphasis Added***)

Thus, previously presented claim 1 recites a data structure which indicates a specific one of the SVCs on which to send each of a received IP packet having a specific precedence value in a TOS field of the header.

As is well known to one skilled in the relevant arts, use of data structures (such as tables, recited in dependent claim 3) provides the capability to dynamically change the SVC allocation policy (by changing the content of the data structure).

While rejecting the previously presented independent claim 1 under 35 U.S.C. § 103,

the Examiner concedes that, "Lai does not explicitly teach the maintaining and use of a table data structure that correlates specific precedence values of a ToS field with corresponding SVCs." (Outstanding Office Action, Page 4, lines 4-6).

5 However, the Examiner relies on portions of Lai (see lines 7-17 of Outstanding Office Action) to conclude, "At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given the above teachings, to perform the above algorithm using a table data structure in order to provide organized storage of the data used for comparison."

Indeed, Lai teaches away from the claimed use of a data structure. In support of such a position, Applicant first notes the relevant portion of Lai:

10 Unlike RSVP, which provides dynamic quality of service in that the resources that are requested may change any time, ***the User Priority scheme does not support dynamic change QoS***. There are several common reasons for a change of reservation QoS. First, an existing receiver can request a new larger QoS. Second, a sender may change its traffic specification, which can trigger a change in the reservation requests of the receivers. Finally, a new receiver can make a reservation that is larger than existing reservations. Since ATM service, as currently defined in UNI 3.x [5] and UNI 4.0, does not allow renegotiating the QoS of a VC, ***dynamically changing the reservation means creating a new VC with the new QoS, and tearing down an established VC. Tearing down a VC and setting up a new VC in ATM are time-consuming.***" (Paragraph 3 of section 6 starting on page 39, ***Emphasis Added***).

20 Thus, Lai states that the user priority scheme does not support dynamic change QoS, in spite of expressly recognizing a need for the dynamic change.

25 It is believed that the data structure of claim 1 would provide such a desired capability, and accordingly it is the applicant's position that the Examiner is using impermissible hindsight gleaned from the applicant's disclosure in asserting that it would have been obvious to one skilled in the art to modify the teachings of Lai to provide the features of previously presented claim 1.

30 Further more, Lai teaches away from the use of the data structures in suggesting that an established VC may need to be torn down and a new VC may need to be created for the dynamic change of QoS.

At least for one of the above noted reasons, claim 1 (as well as dependent claim 3) is not rendered obvious under 35 U.S.C. § 103. Claims 3-10 are also allowable as depending from an allowable base claim 1.

Claim 7 is independently allowable in reciting that, "... sending a precedence data from said first router to said second router..". Contrary to the assertion in the Outstanding Office Action, the Applicants do not find the teaching or suggestion of such a feature in Lai. Furthermore, Lai teaches in relevant parts:

... There is ***no requirement that both the client and server use the same User Priority***. That is so called "Asymmetric Transfer Mode". For example, server sends packets on the QoS VC, but client uses the BE VC.
(Page 33 lines 3-5 of Lai, ***Emphasis Added***)

Thus, Lai clearly states that there is no requirement that both the client and server use the same priority. Accordingly, it is believed that the required motivation to modify Lai to provide the features of claim 7, is lacking. Furthermore, Lai teaches an alternative solution to use different VCs in different directions between the same systems (server and client). Accordingly, claim 7 is independently allowable over Lai.

At least some of the arguments provided above with respect to independent claim 1 are also relevant in the case of independent claims 16, 27 and 39. Thus, claims 16, 27 and 39 are also believed to be allowable. Dependent claims 18-23, 29-35, and 41-47 are respectively allowable at least as depending on respective base claim 16, 27 and 39.

New independent claim 56 contains the features recited in previously presented claim 11, indicated to be allowable. Accordingly, new claim 56 is believed to be allowable over the art of record. Claims 57-60 are allowable at least as depending from allowable base claim 56.

New dependent claim 58 is believed to contain all the features of claim 11 (indicated to be allowable in the Outstanding Office Action), including those recited in intervening

claims 3 and 5 and base claim 1. Accordingly, claim 58 is believed to be in condition for allowance.

5 New claims 61-70 are also allowable at least for some of the reasons noted above with respect to claims 56-60. Thus, all the claims presented for consideration are believed to be allowable.

Claim Rejections 35 U.S.C. § 103

10 Claims 52-55 were rejected under 35 USC 103 (a) as being unpatentable over Liu in view of US Patent 6,618,381 issued to Miyamoto *et al* (hereinafter "Miyamoto"). This rejection is believed to be rendered moot in view of the foregoing amendments and remarks.

15 Withdrawal of the rejection under 35 U.S.C. § 103 against claims 1, 3-10, 16, 18-23, 27, 29-34, 39, 41-46 and 52-55 is respectfully requested.

15 Thus, all the objections and rejections are believed to be overcome. The Examiner is invited to telephone the undersigned representative at 707.356.4172 if it is believed that an interview might be useful for any reason.

Respectfully submitted,

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Signature

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